



Micro Commercial Components



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# SK52AFL Thru SK5200AFL

## 5.0 Amp Schottky Rectifiers 20 to 200 Volts

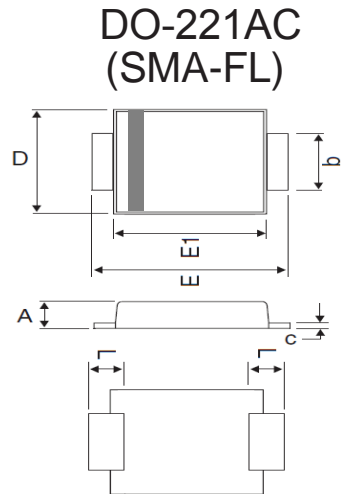
### Features

- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

### Maximum Ratings

- Operating Temperature: -55°C to +125°C (SK52AFL-SK510AFL)  
-55°C to +150°C (SK5150AFL-SK5200AFL)
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance: 120°C/W Junction To Ambient  
30°C/W Junction To Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SK52AFL	SK52	20V	14V	20V
SK53AFL	SK53	30V	21V	30V
SK54AFL	SK54	40V	28V	40V
SK55AFL	SK55	50V	35V	50V
SK56AFL	SK56	60V	42V	60V
SK58AFL	SK58	80V	56V	80V
SK510AFL	SK510	100V	70V	100V
SK5150AFL	SK5150	150V	105V	150V
SK5200AFL	SK5200	200V	140V	200V

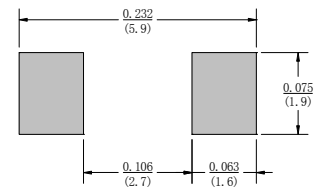


### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	5.0A	$T_L = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	100A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$ SK52AFL-SK54AFL SK55AFL-SK56AFL SK58AFL-SK510AFL SK5150AFL SK5200AFL	0.55V 0.70V 0.85V 0.87V 0.90V	$I_{FM} = 5.0A$ ; $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$ SK52AFL-SK58AFL SK58AFL-SK5200AFL	0.5mA 10mA 0.2mA 5mA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$ $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Typical Junction Capacitance	$C_J$ SK52AFL-SK54AFL SK55AFL-SK56AFL SK58AFL-SK510AFL SK5150AFL SK5200AFL	300pF 210pF 170pF 150pF 110pF	Measured at 1.0MHz, $V_R=4.0V$

DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.035	.047	0.90	1.20	
b	.049	.065	1.25	1.65	
C	.004	.016	0.10	0.40	
D	.089	.116	2.25	2.95	
E	.173	.220	4.40	5.60	
E1	.126	.181	3.20	4.60	
L	.028	.059	0.70	1.50	

### SUGGESTED SOLDER PAD LAYOUT



Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

## SK52AFL THRU SK5200AFL

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

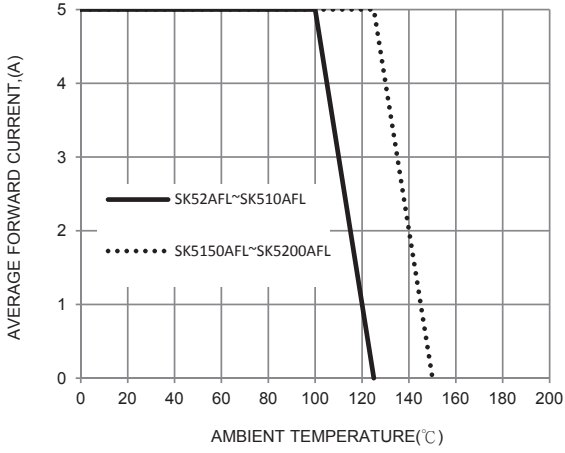


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

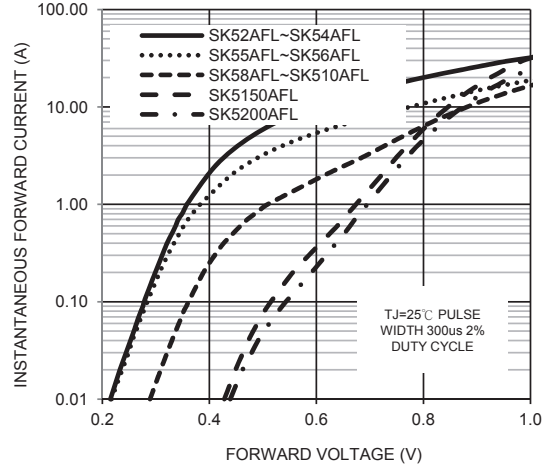


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

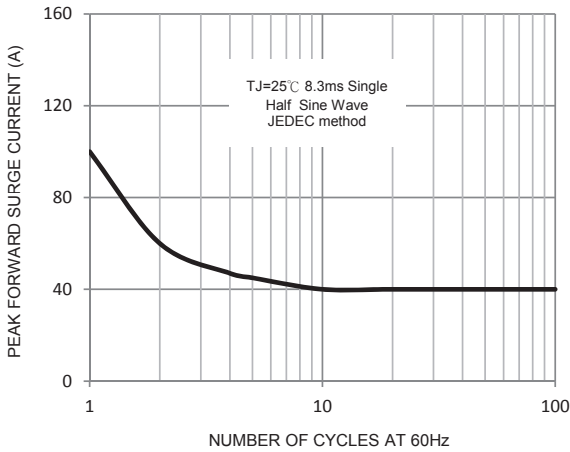


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

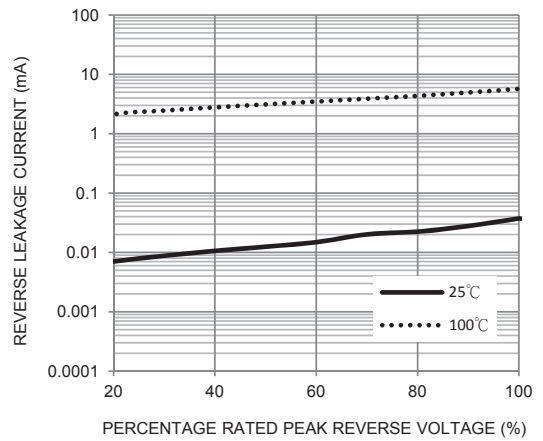
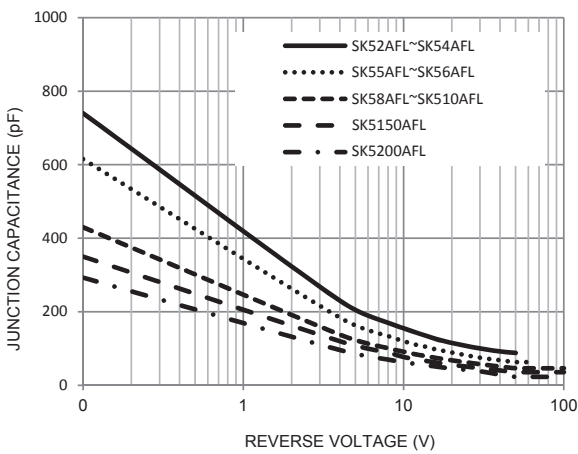


FIG. 5-TYPICAL JUNCTION CAPACITANCE





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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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